

Modeling Labor Markets in Agent-Based Macroeconomics

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Abstract

The literature on macroeconomic agent-based models (MABMs) has gained growing attention since the early 2000s. Most MABMs dealing with market regulations have been focusing on the financial market. In contrast, only a small number of MABMs investigate the effects of labor market regulations. In this paper, we provide a parsimonious yet extendable agent-based model that focuses on labor market dynamics within a macroeconomic framework, suitable to analyze labor market regulations such as minimum wages and employment protection legislations. The model is stock-flow-consistent and small-scaled, i.e., there are only households and firms interacting in the goods and in the labor market. Firms produce according to a CES production function, and we distinguish between skilled and unskilled workers. In order to gain insights into the mechanisms and patterns produced by the model, we perform a one-factor-at-a-time (OFAT) sensitivity analysis. Preliminary results suggest that for reasonable values of the minimum wage the effect on GDP and aggregate consumption is positive if skilled and unskilled workers are gross substitutes.

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